

S/N 09/491,991

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Dean Cheng et al.

Examiner: Gregory Todd

Serial No.: 09/491,991

Group Art Unit: 2457

Filed: January 26, 2000

Docket No.: 1370.323US1

Customer No.: 21186

Confirmation No.: 9322

For: MANAGING NETWORK CONGESTION USING DYNAMICALLY
ADVERTISED CONGESTION STATUS

REPLY BRIEF UNDER 37 C.F.R. 41.41

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Appellants respectfully submit this Reply Brief in response to the Examiner's Answer of
May 13, 2010.

I. STATUS OF THE CLAIMS

Claims 1-68 of the present application are pending and remain rejected. The Appellant hereby maintains its appeal of the rejection of claims 1-68.

II. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

- A. Claims 52-68 are definite under 35 U.S.C. § 112, second paragraph.
- B. Claims 1-7, 10-15, 18-24, 27-32, 35-41, 44-49, 52-58, and 61-66 are not rendered obvious over Fukuta in view of Proctor under 35 U.S.C. § 103(a).
- C. Claims 8-9, 16-17, 25-26, 33-34, 42-43, 50-51, 59-60 are not rendered obvious over Fukuta in view of Proctor, and further in view of Fedyk.

III. ARGUMENTS

Appellants request to maintain the appeal with the Board. Appellants have reviewed the Examiner's Answer and believe the statements presented in the Primary Brief remain accurate and compelling. Appellants' remarks in response to certain points raised by the Office follow, including the new grounds of rejection under 35 U.S.C. § 112, second paragraph, rejecting claims 52-68.

A. Claims 52-68 Are Definite Under 35 U.S.C. § 112, Second Paragraph

The Examiner issued a new grounds for rejection with respect to claims 52-68, asserting that claims 52-68 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Appellants respectfully traverse the rejections for the following reasons.

Claims 52-60

Independent claim 52 recites in part:

means for determining a congestion status associated with a node in a single peer group or hierarchical level in the network, the congestion status being represented by a transit flag accessible to at least one other node in the single peer group or the hierarchical level to determine if a call is routed through the node;

Appellants agree with Examiner that this limitation invokes 35 U.S.C. § 112, sixth paragraph. The Examiner raises the § 112, second paragraph, indefiniteness rejection because the Examiner alleges sufficient corresponding structure, material, or acts for performing the claimed function "determining a congestion status" are not disclosed by the specification and drawings. *See* Examiner's Answer of May 13, 2010, p. 13. Appellants disagree.

In addition to previously identified structure (block 410 of FIG. 4 and page 9, lines 21-24 of the specification), Appellants identify at least page 5, line 4 through page 6, line 4 and FIGS. 1 and 3 as additional support that specifies corresponding structure, material, or acts for performing the claimed function recited in the above-identified limitation of independent claim 52. This portion of the specification recites that each node described in FIG. 1 (*e.g.*, nodes N1 110, N2 120, N3 130) is an ATM switch that performs switching and routing functions. The Specification further recites that

each node is “capable of measuring its own operational conditions such as traffic flow status, resource availability, maintenance status, etc.” Specification, p. 5, lines 10-13. Further, the Specification states this measurement is typically performed locally at each ATM switch or network node, and can be performed using inter-switch network information or Service Specific Connection Oriented Protocol (SSCOP) L3 as specified in the ATM specifications UNI 3.1 and 3.0. Specification, p. 5, lines 14-17. The Specification further states that the “measured conditions are used to indicate a congestion status which indicates whether or not a node has become congested.” Specification, p. 5, lines 17-19. Appellants thus submit that at least an ATM switch and its concomitant functionality are a sufficient disclosure of structure, material, or acts for performing the claimed function of the above-recited limitation of independent claim 52.

Appellants further note the Examiner’s citation of *Aristocrat Technologies, Inc. v. International Game Technology*, 521 F.3d 1328, 86 U.S.P.Q.2d 1235 (Fed. Cir. 2008) and *WMS Gaming, Inc. v. International Game Technology*, 184 F.3d 1339, 51 U.S.P.Q.2d 1385 (Fed. Cir. 1999) are inapplicable in the instant case, as an ATM switch (and its concomitant functionality) as disclosed in the specification is not a general purpose computer.

Appellants submit additional disclosed supporting structure exists in the form of FIG. 3, which the Specification describes as a computer system for congestion management. In particular, the Specification states the congestion management computer system “may be used as part of an ATM switch, a host machine, a workstation, a local area network (LAN), and any other system or subsystem connected to the network.” Specification, page 7, lines 23-25. The computer system includes system memory (element 330 of FIG. 3) that contains a congestion manager (element 105 of FIGS. 1 and 2). Specification, page 8, lines 17-18. The congestion management computer system falls outside the purview of *Aristocrat* and *WMS Gaming* as well because it is not a general purpose computer; rather, the congestion management computer system may be part of an ATM switch, a host machine, a workstation, or a local area network, among other things. Thus, the embodiment of the congestion management computer system shown in FIG. 3 and discussed in the Specification provides further structural support for the above-recited limitation of independent claim 52.

Appellants thus submit sufficient corresponding structure, material, or acts are disclosed in the Specification and drawings to render independent claim 52 definite under 35 U.S.C. § 112,

second paragraph. For at least these reasons, Appellants respectfully submit independent claim 52 is definite under 35 U.S.C. § 112, second paragraph, and that it was error to reject the Appellants' claim 52 on these grounds.

At least the above-identified portions of the Specification and Drawings further provide sufficient corresponding structure for claims 53-60. Appellants further note that claims 55-58 do not recite means-plus-function limitations save for their dependency to claim 52, and therefore, are definite for at least the same reasons as claim 52. For at least these reasons, Appellants respectfully submit claims 53-60 are definite under 35 U.S.C. § 112, second paragraph, and that it was error to reject these claims on these grounds.

Claims 61-68

Independent claim 61 recites in part:

means for receiving a congestion status associated with a node in a single peer group or hierarchical level in the network, the congestion status corresponding to a measured node condition at the node and being broadcast by the node to at least one other node in the single peer group or the hierarchical level, the congestion status being represented by a transit flag accessible to at least one other node to determine if a call is routed through the node;

Appellants agree with Examiner that this limitation invokes 35 U.S.C. § 112, sixth paragraph. The Examiner raises the § 112, second paragraph, indefiniteness rejection because the Examiner alleges sufficient corresponding structure, material, or acts for performing the claimed function "determining a congestion status" are not disclosed by the specification and drawings. *See* Examiner's Answer of May 13, 2010, pp. 15-16. Appellants disagree.

Similar to the reasons provided above in response to the § 112, second paragraph, rejection of independent claim 52, Appellants submit sufficient support exists in the Specification and Drawings for overcome the Examiner's rejection. For example, the Specification discloses on page 5, lines 4-20 that each node illustrated in FIG. 1 is an ATM switch and that messages may be sent to and from one node to another via established connection links. These messages may include congestion status which can be broadcast or advertised to other nodes within the network. Thus, Appellants submit sufficient corresponding structure, material, or acts are disclosed in the Specification and drawings to

render independent claim 61 definite under 35 U.S.C. § 112, second paragraph.

At least the above-identified portions of the Specification and Drawings further provide sufficient corresponding structure for claims 62-68. Appellants further note that claims 63-64 and 66 do not recite means-plus-function limitations save for their dependency to independent claim 61, and therefore, are definite for at least the same reasons as claim 61.

For at least these reasons, Appellants respectfully submit claims 61-68 are definite under 35 U.S.C. § 112, second paragraph, and that it was error to reject these claims on these grounds.

B. Claims 1-7, 10-15, 18-24, 27-32, 35-41, 44-49, 52-58, and 61-66 Are Not Obvious Over Fukuta In View of Proctor Under 35 U.S.C. § 103(a)

Appellants maintain the arguments presented in Appellants' Primary Brief with respect to the § 103(a) rejection of claims 1-7, 10-15, 18-24, 27-32, 35-41, 44-49, 52-58, and 61-66. In addition, Appellants offer the following remarks in response to the Examiner's Answer.

The Examiner's Answer maintains the contention that Fukuta (U.S. Patent No. 5,090,011) teaches the claimed feature of "broadcasting the congestion status from the node to the at least one or the node in the single peer group or the hierarchical level."

Appellants respectfully disagree. Appellants emphasize that, as stated in the Appellants' Primary Brief, Fukuta does not teach **broadcasting** a congestion status from a node to at least one other node. Instead, Fukuta discloses a packet congestion control method where a data packet transmitted from a packet communication equipment to a packet switch undergoing congestion is **simply returned** as a congestion notice packet to the same packet communication equipment. *See, e.g.,* Fukuta, column 16, lines 21-32. Returning a packet from a congested packet switch to the source equipment of the packet is not broadcasting of the packet.

The Examiner's Answer states that returning a packet to its source from a packet switch suffering from congestion constitutes "broadcasting," and that "broadcasting" is to be interpreted as a simple transmission from one node to another. Examiner's Answer of May 13, 2010, pp. 19-20. This interpretation is overbroad and overreaching. Representative independent claim 1 states that the congestion status is "represented by a transit flag accessible to at least one other node..." and that the congestion status is broadcasted to at least one other node. Broadcasting is different from simple

transmission. As stated in the Appellants' Principal Brief, Fukuta explicitly states that a congestion indicator is returned to the transmission source of a packet.

Fukuta further illustrates that this congestion indicator is not made accessible to other nodes and is not broadcasted to at least one other node. Rather, the congestion indicator is described in Fukuta, column 5, lines 7-13 as being "added to a header portion *to be used only in the switch and is removed when the packet is passed through the transmission interface circuit*" (emphasis added). Fukuta further states that "[i]n consequence, the transmission packet sent to the destination equipment does not include the congestion indicator." Fukuta, column 5, lines 11-13. Thus, Fukuta's congestion indicator is of a temporary nature used by a packet switch to return a packet to the transmission source. It is not made accessible to at least one other node.

Proctor also does not teach or suggest these elements of the independent claims, nor is it relied upon by the Examiner's Answer for teaching or suggesting these elements. Appellants interpret the Examiner's Answer's silence concerning Proctor with respect to these elements of the pending independent claims as an admission that Proctor does not remedy Fukuta's deficiencies. Thus, Appellants respectfully submit that for at least these reasons and the reasons presented in the Appellants' Primary Brief, independent claims 1, 10, 18, 27, 35, 44, 52, and 61, and claims 2-7, 11-15, 19-24, 28-32, 36-41, 45-49, 53-58, and 62-66, which depend from these independent claims, respectively, are not rendered obvious over Fukuta in view of Proctor.

C. Claims 8-9, 16-17, 25-26, 33-34, 42-43, 50-51, and 59-60 Are Not Obvious Over Fukuta In View of Proctor and Further In View of Fedyk

With respect to the rejection of claims 8-9, 16-17, 25-26, 33-34, 42-43, 50-51, and 59-60, Appellants maintain the arguments presented in Appellants' Primary Brief, and request that the § 103(a) rejection of these claims be withdrawn.

CONCLUSION

In summary, for the reasons set forth above and in the Appeal Brief, the claims have been improperly rejected. Therefore, Appellants respectfully request that these rejections be reversed, with allowance of the pending claims.

Appellants submit that all of the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Appellants' representative at (408) 278-4056 to facilitate prosecution of this application.

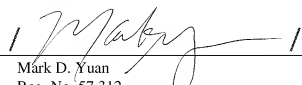
If necessary, please charge any additional fees or credit overpayment to Deposit Account 19-0743.

Respectfully submitted,

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Date 13 July 2010

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